

Appl. No. 10/761,161
Amdt. dated November 17, 2005
Reply to Office action of August 23, 2005

Amendments to the Specification:

Please replace the paragraph beginning at page 2, line 15, with the following rewritten paragraph:

When the probe is used for measuring pieces of complex shape with hollows and protuberances, it is difficult, if not impossible, to bring the feeler into contact with the whole surface of the piece without the probe's fixed part or the feeler's rod interfering with the elements of the piece to be measured. To remedy this inconvenience ~~inconvenient~~, probes are known that allow the contact feeler to be oriented in a plurality of spatial directions. Generally, two independent rotation axes are required to cover all the possible orientations. A probe of this type is described in European patent application EP-0'392'660-A2.

Please replace the paragraph beginning at page 3, line 7, with the following rewritten paragraph:

Another inconvenience ~~inconvenient~~ of the probe described here above is that the locking and unlocking operations require an external torque to be applied onto the locking wheel, which is transmitted by the probe and its support to the mobile arm of the measuring machine. This net torque causes mechanical efforts on the probe's support and can cause the whole probe to move. To avoid this inconvenience ~~inconvenient~~, the user must hold the probe motionless when acting on the locking wheel, which makes it difficult or even impossible to perform this operation with a single hand.

Please replace the paragraph beginning at page 6, line 23, with the following rewritten paragraph:

It would be difficult to apply a force of 30 N directly on the buttons 310. For this reason, the slope of the inclined surfaces 302 is chosen to give a sufficient demultiplication ratio between the radial force exerted on the buttons 310 and the

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axial force opposing the elasticity of the spring 215. A reduction ratio ~~ratio~~ of 1:2 means an operation force on the buttons 310 of about 15 N, i.e. approximately 1.5 Kgf, which the user can exert without great difficulty. With this reduction ratio, the run of the buttons 310 remains contained within several millimeters.

Please replace the paragraph beginning at page 8, line 9, with the following rewritten paragraph:

The disengaging and rotating system 400 of the second mobile element 220 is represented in figure 2b. The disengaging is performed by pressing on the two buttons 411 and 410. The axial force applied on the button 410, capable of sliding axially around the piece 470, is transmitted by the two levers 430 and 450 and by the horizontal arm 440, and is multiplied and applied by the pin 461 and the rod 460 to the spring 225, in order to compress the latter, which suppresses the contact force between 220 and 210. In this embodiment, the dimensions of the arms of the levers 430, 450 will be chosen of unequal length to obtain a reduction ratio of the operation force of 1:2, as for the first mobile element 210. A second spring 475, placed between the button 410 and the piece 470, pushes axially towards the right in figure 2a the second mobile element 220 while allowing it to rotate.

Please replace the paragraph beginning at page 11, line 11, with the following rewritten paragraph:

A window 41 ~~30~~ is provided on the supporting element 250 to allow the rotation angle relative to the first axis 211 to be read on a scale engraved or printed on the first mobile element 210, as can be seen in figures 5a and 5b.